

An abstract network diagram with numerous blue circular nodes of varying sizes connected by thin, light blue lines. The nodes are distributed across the frame, with a higher density in the upper right and lower right areas, creating a complex web-like structure.

Chelsea Gorsline, MD

Erin Gettler, MD

Infectious Diseases Clinical Fellows

Vanderbilt University Medical Center

*Antibiotic  
Awareness Week  
during a Pandemic*

Use of digital  
and social media  
to promote  
antimicrobial  
stewardship

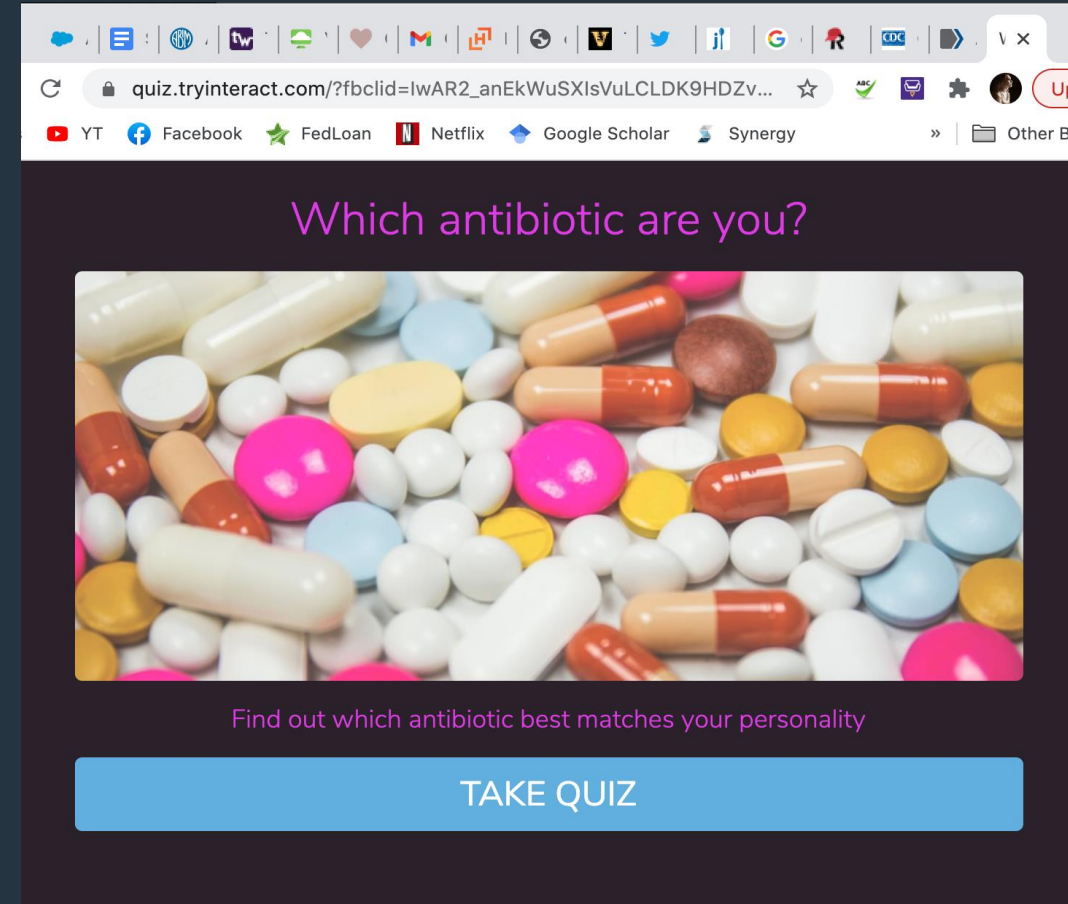
# *Antibiotic Awareness Week (AAW)*



- AAW is an important time to highlight antimicrobial stewardship in combating antimicrobial resistance and promoting patient safety.
- Target audience should include healthcare providers and patients.
- The scope of educational outreach can be improved with the use of digital and social media.

# *Social Media*

- Use of social media for educational intent is on the rise.
- In 2017, an ASP group developed an antibiotic personality quiz as part of AAW in Canada.
  - Quiz was shared across multiple platforms of social media and generated widespread engagement.
  - Findings were presented at IDWeek 2020 and encouraged use of game play in stewardship educational campaigns.



<https://quiz.tryinteract.com/#59e68e3a8ecd1200126656e8>



# Which Antibiotic Are You?

## Evaluation of a Global Antibiotic Awareness Quiz

BJ Langford<sup>1,2</sup> PharmD BCPS, M Laguio-Vila<sup>3</sup> MD

1. Hotel Dieu Shaver Health and Rehabilitation Centre, ON, Canada 2. Public Health Ontario, ON, Canada 3. Rochester Regional Health, NY, USA

Contact:  
[brad.langford@gmail.com](mailto:brad.langford@gmail.com)

Try the quiz



### Background

Play is an underutilized modality for adult learning. Our objective was to evaluate the reach of a web-based antibiotic personality quiz to promote antibiotic stewardship awareness.

### Methods

- A personality quiz was developed using an online platform (Tryinteract.com).
- Antibiotic personalities were created based on individual drug pharmacokinetic attributes, side effect profiles, and organism spectra of coverage.
- Based on the responses provided, the respondent was assigned an antibiotic that best matched his/her personality. The result was accompanied by key teaching points and links to find more information.
- The quiz was launched in November 2017 to coincide with World Antibiotic Awareness Week and disseminated via social media. It was updated iteratively each year.
- We evaluated usage statistics from November 7 2017 to June 7 2020.

### Example Antibiotic Personality

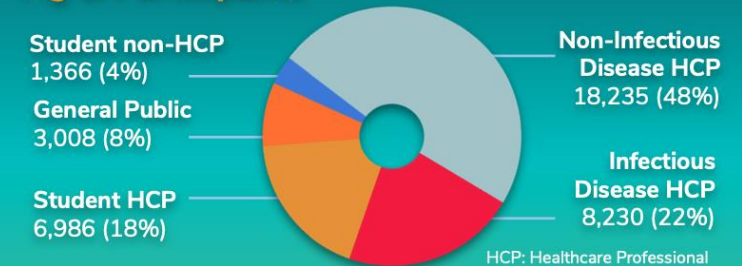
**You are doxycycline!** You are an under-rated talent who flies below the radar, and others often don't see your true potential. You find that people either really like you or simply don't know you exist. You're on the quiet side and wish people would get to know you more. You tend to not be as physically active as others and often stay indoors to avoid too much sun.

An **antibiotic awareness personality quiz** circled the globe and engaged a high volume and broad range of **non-infectious disease participants** in learning more about antibiotic stewardship

By 2050 it is estimated that deaths due to antibiotic resistance will be greater than deaths due to cancer and road traffic accidents combined!

Using antibiotics only when needed, at the right dose and duration can help reduce this major public health threat.

Fig 1. Participants



### Results



#### 207,097 Completions

The quiz was viewed 287,793 times and completed 207,097 times. Most referrals were via Twitter and Facebook



#### Global Involvement

Respondents were well-represented globally, including US, Canada, Spain, France, India, United Kingdom, and Indonesia



#### Interdisciplinary Participation

Most respondents (48%) identified as non-ID healthcare professionals, followed by ID healthcare professionals (22%) and students (18%)

### Conclusions

An antibiotic awareness personality quiz engaged a high volume and broad range of participants. Antimicrobial stewards should consider incorporating play into awareness campaigns

# Infectious Spread of Social Media

## Usage of social media during the pandemic: Seeking support and awareness about COVID-19 through social media platforms

Muhammad Saud ✉, Musta'in Mashud ✉, Rachmah Ida

First published: 15 September 2020 | <https://doi.org/10.1002/pa.2417>

## Social Media and the New World of Scientific Communication During the COVID-19 Pandemic

Simon Pollett ✉, Caitlin Rivers

*Clinical Infectious Diseases*, Volume 71, Issue 16, 15 October 2020, Pages 2184–2186,  
<https://doi.org/10.1093/cid/ciaa553>

**Published:** 12 May 2020 **Article history** ▼

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## How the field of infectious diseases can leverage digital strategy and social media use during a pandemic

Jasmine R Marcelin, Nicolas Cortés-Penfield, Carlos del Rio, Angel Desai, Ignacio Echenique, Bruno Granwehr, Folake Lawal, Kevin Kuriakose, Dong Heun Lee, Maricar Malinis ... [Show more](#)

*Open Forum Infectious Diseases*, ofab027, <https://doi.org/10.1093/ofid/ofab027>

**Published:** 19 January 2021 **Article history** ▼

[Bull Math Biol.](#) 2020; 82(7): 86.

PMCID: PMC7329999

Published online 2020 Jul 2. doi: [10.1007/s11538-020-00757-4](https://doi.org/10.1007/s11538-020-00757-4)

PMID: [32617673](https://pubmed.ncbi.nlm.nih.gov/32617673/)

## Trending on Social Media: Integrating Social Media into Infectious Disease Dynamics

[J. Sooknanan](#) and [D. M. G. Comissiong](#) ✉

# *Social Media Use Reaching High-Impact Journals and Professional Organizations*

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SCIENCE GUIDING PREVENTION

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Pre-Conference Workshop

*Sharing Our Science: Using Modern Means to Get Your Message Out There*



# *AAW at Vanderbilt University Medical Center (VUMC)*

- In years past, educational materials were displayed at a table staffed by a member of the Stewardship Committee.
- Engagement with providers and patients was limited and brief.
- COVID-19 prevented this traditional approach.
- Therefore, we leveraged social and digital media to expand provider and patient AAW participation.

## *AAW at VUMC*

- Twitter is popular amongst housestaff, faculty and departments at VUMC.
- The ID fellowship joined Twitter in July 2020 (@VUMC\_IDfellows) and operates closely with the ID division's Twitter account (@VUMC\_ID).
- These accounts were a natural target to be the hub of the AAW education campaign.





# Methods

- Quick Response (QR) codes were generated and linked to CDC AAW educational materials.
- AAW posters and QR codes were displayed throughout VUMC.
- People were encouraged to scan the QR code, then tweet the content with our Twitter account tagged.
- Entry into a drawing for a small participation incentive was offered to housestaff.



# Methods


- We collaborated with the VUMC Director of Patient Education to compose a brief patient-centered message using the CDC's AAW Partner Toolkit.
- This was then broadcast to all adult patients admitted to VUMC using the GetWellNetwork© software with a link to additional AAW educational materials.
- We also generated unique Tweets related to AAW to post on our Twitter account.



<https://www.getwellnetwork.com/getwell-inpatient/>

# AAW by the Numbers

- 150 QR code scans
- 9 people tweeted the QR code content and tagged our account
- 11 new Twitter followers to the @VUMC\_IDfellows account
- 3 housestaff won Amazon gift cards
- 8 Tweets from the @VUMC\_IDfellows account received
  - 4615 views
  - 395 interactions
- 1,899 inpatient televisions had our AAW message broadcast
  - 885 (47%) patients viewed the message
  - 201 (11%) patients clicked on the embedded link

 **William Winter**  
@doctorbillmd

What's got you sick?  
[@VUMC\\_IDfellows](#) @VUMC\_ID


## Viruses or Bacteria

What's got you sick?


Antibiotics are only needed for treating certain infections caused by bacteria. Viral illnesses cannot be treated with antibiotics. When an antibiotic is not prescribed, ask your healthcare professional for tips on how to relieve symptoms and feel better.

Common Condition	Common Cause			Are Antibiotics Needed?
	Bacteria	Bacteria or Virus	Virus	
Strep throat	✓			Yes
Whooping cough	✓			Yes
Urinary tract infection	✓			Yes
Sinus infection		✓		Maybe
Middle ear infection		✓		Maybe
Bronchitis/chest cold (in otherwise healthy children and adults)*		✓		No*
Common cold/runny nose			✓	No
Sore throat (except strep)			✓	No
Flu			✓	No

\* Studies show that in otherwise healthy children and adults, antibiotics for bronchitis won't help you feel better.

 **BE ANTIBIOTICS AWARE**  
SMART USE. BEST CARE

To learn more about antibiotic prescribing and use, visit [www.cdc.gov/antibiotic-use](http://www.cdc.gov/antibiotic-use).





# *Results*

- Through the use of digital and social media we achieved expanded outreach to providers, patients, non-medical staff and Twitter community.
- Our methods allowed for the ability to quantify messaging impact.
- We gained new Twitter followers, which may amplify the scope of future educational messaging.
- Identifying champions within the Offices of Patient Education and Quality, Safety, and Risk Prevention led to greater impact of our project.

# *Future Directions*

- We hope to partner with other organizations to increase provider and patient engagement during AAW.
- We plan to incorporate digital and social media into future stewardship campaigns.
  - QR codes
  - QuizTime platform
  - Scavenger hunts

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